The MINERνA Operations Report
All Experimenters Meeting

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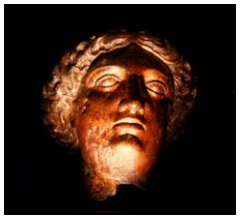
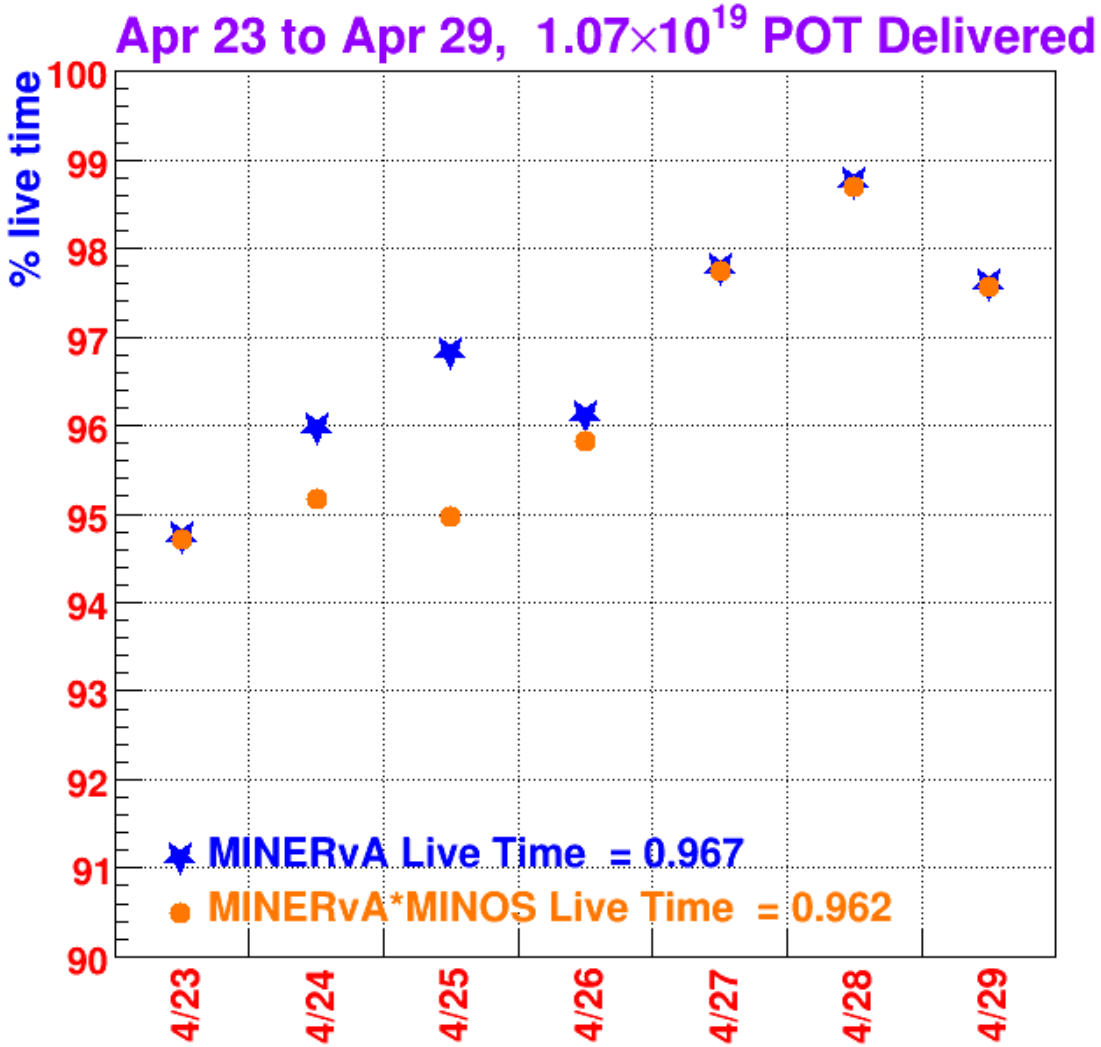
May 4, 2015

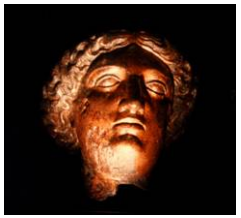
ν Data



- Live time, 4/23-29, 2015
- 1.07×10^{19} POT
- MINERvA 96.7%
- MINERvA*MINOS 96.2%

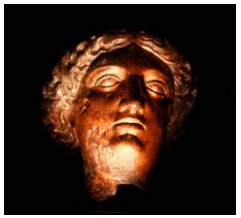


ν Data



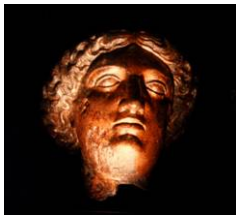
- Apr 23 – 26, 96% live
  - We saw this message on runcontrol:
    - “At least one of the monitoring nodes has become unresponsive“.
    - The DAQ would hang trying to start the next subrun, and the shifter would have to run the “restart DAQ” script to get the DAQ running. This was happening a lot during this period of time.
    - The monitoring node is mnvonlinelogger (“Logger”).
  - The NTP configuration on Logger did not specify a NTP server to use.
    - Around March 9 the clock on Logger was about 45 seconds behind real time. The time on Logger was updated to be correct.

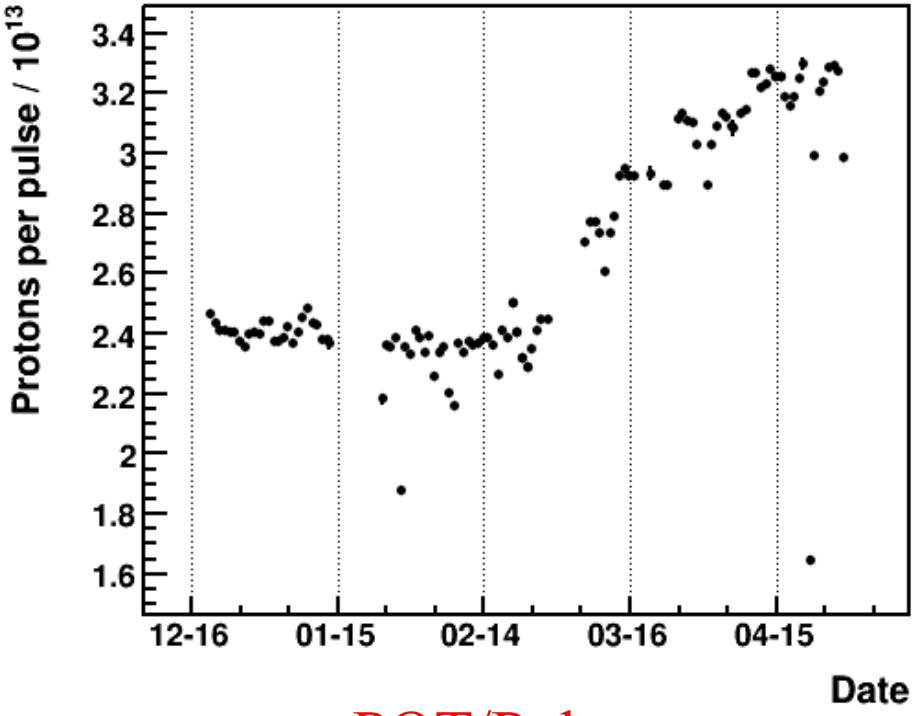
ν Data



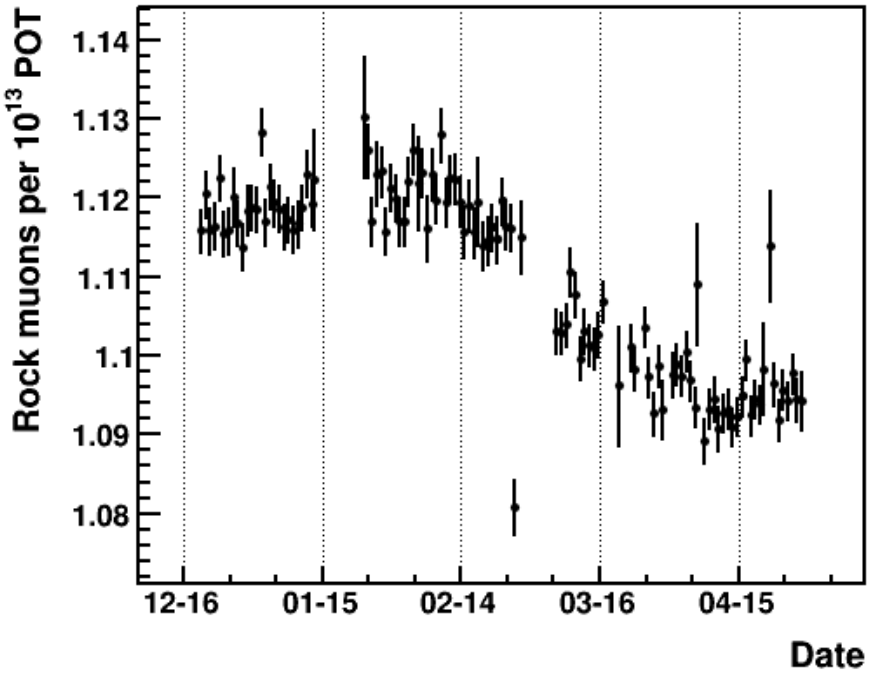
- We don't know whether the time on Logger was off, but on Apr 27 Logger was synchronized to the same NTP server that the DAQ machine is synchronized to.
  - We have not seen the same error message since then, so this was possibly the problem.
- It is possible that for Apr 24-26, some of the inefficiency was due to a small number of files not being analyzed in "keepup". Although it is clear we needed to run the "restart DAQ" script a lot, these down times were not showing up in our upTime plot. This means the down times were fairly short, as the shifter got the DAQ working quickly.
- We will present Apr 24-26 again next week.

Rock Muons/POT





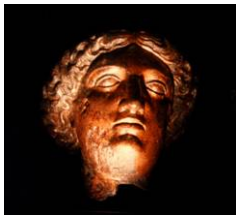
POT/Pulse

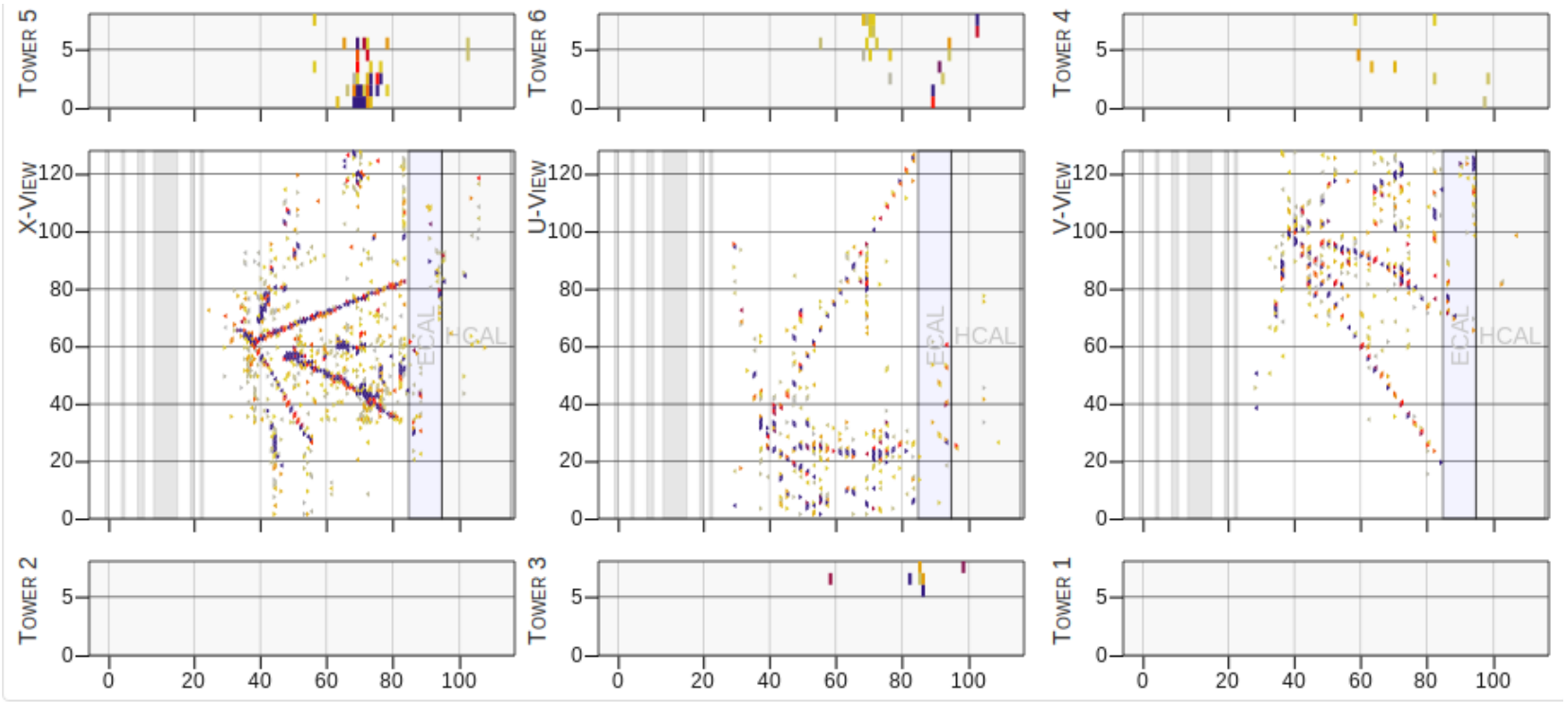


Rock Muons/POT

Note: this is a 2.5% drop in measured rock muons/POT for an increase of 50%.
In fact, the proton/microsecond rate is 2 times higher for 33% of the spill.
At least part of this inefficiency is due to DAQ deadtime during the spill
We will upgrade the firmware to address this problem during the shutdown, details in a future AEM

Event Display

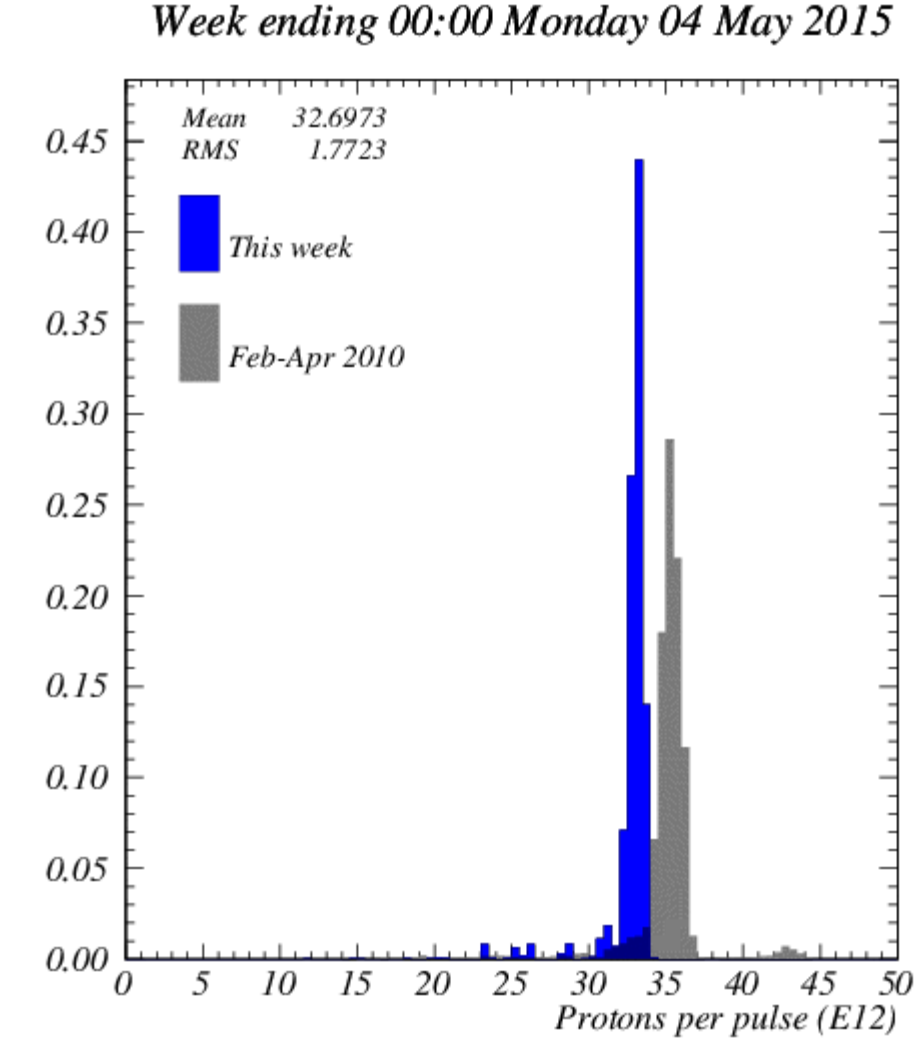


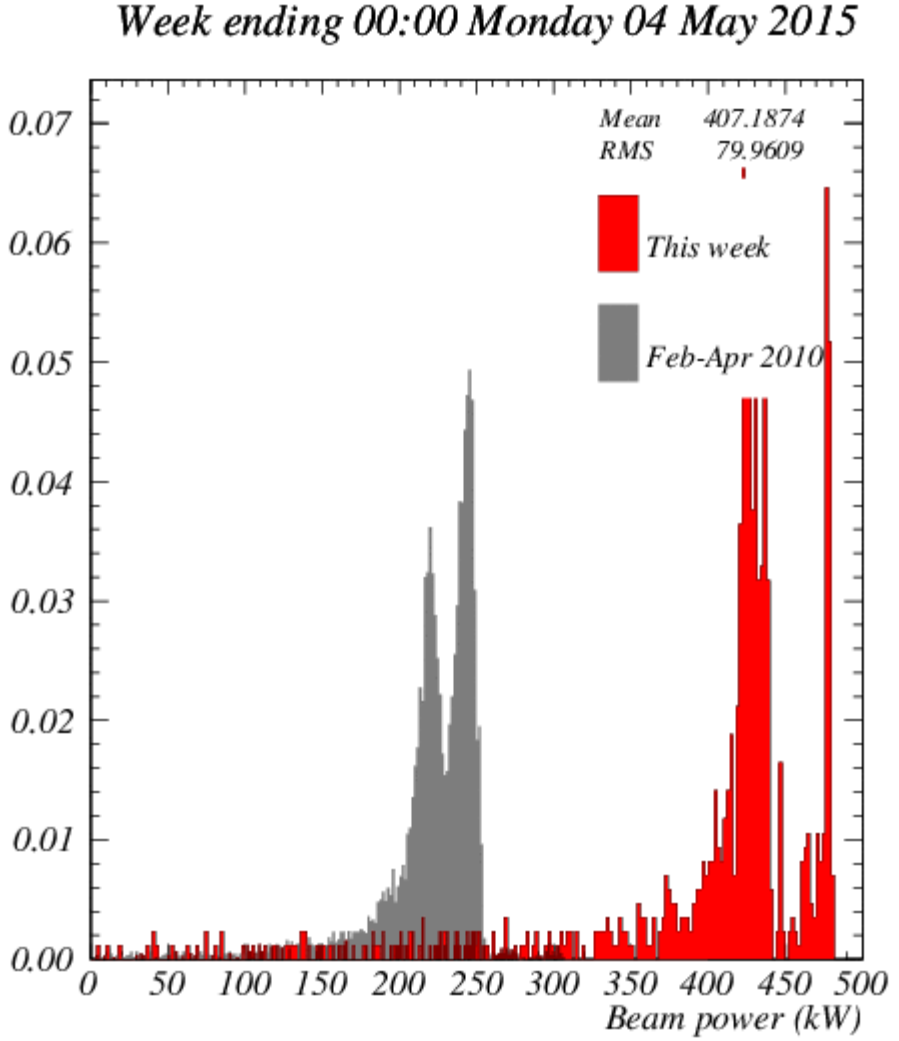


X View V View U View

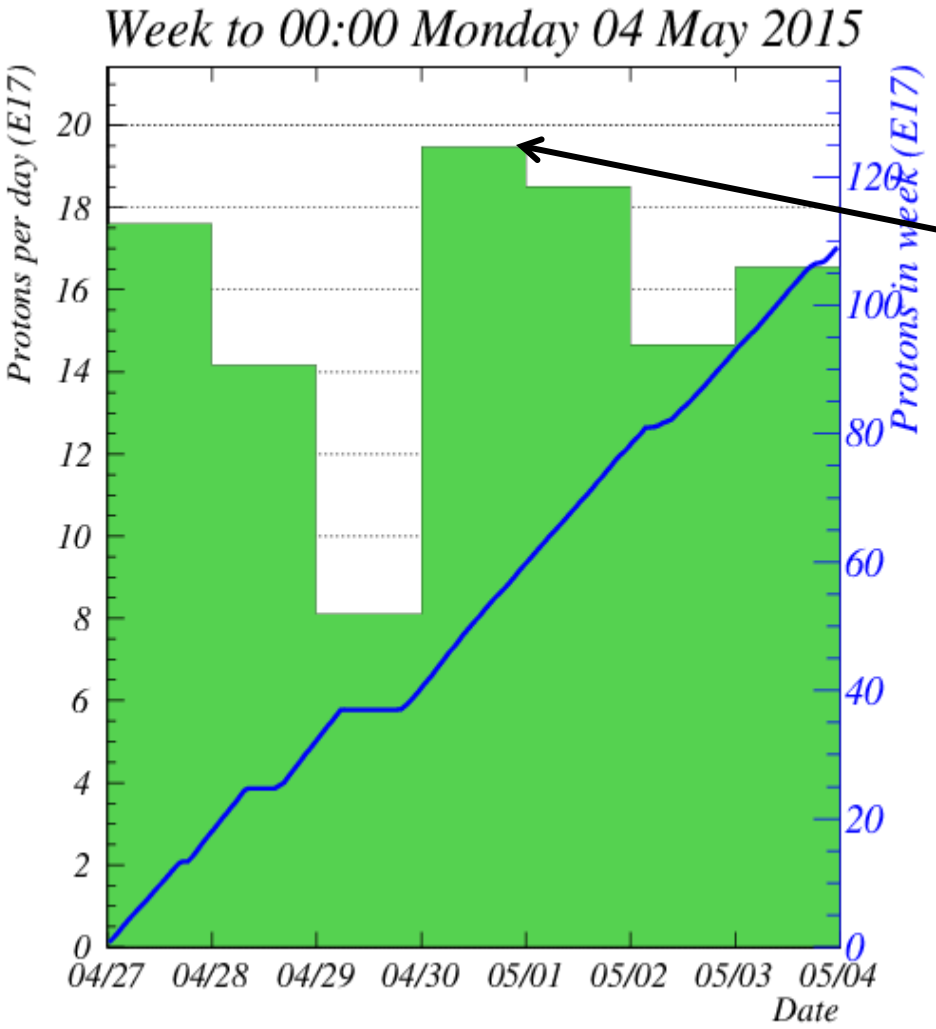
Tracker CC π^0 Event

NuMI Beam Plots
Apr 27-May 3, 2015





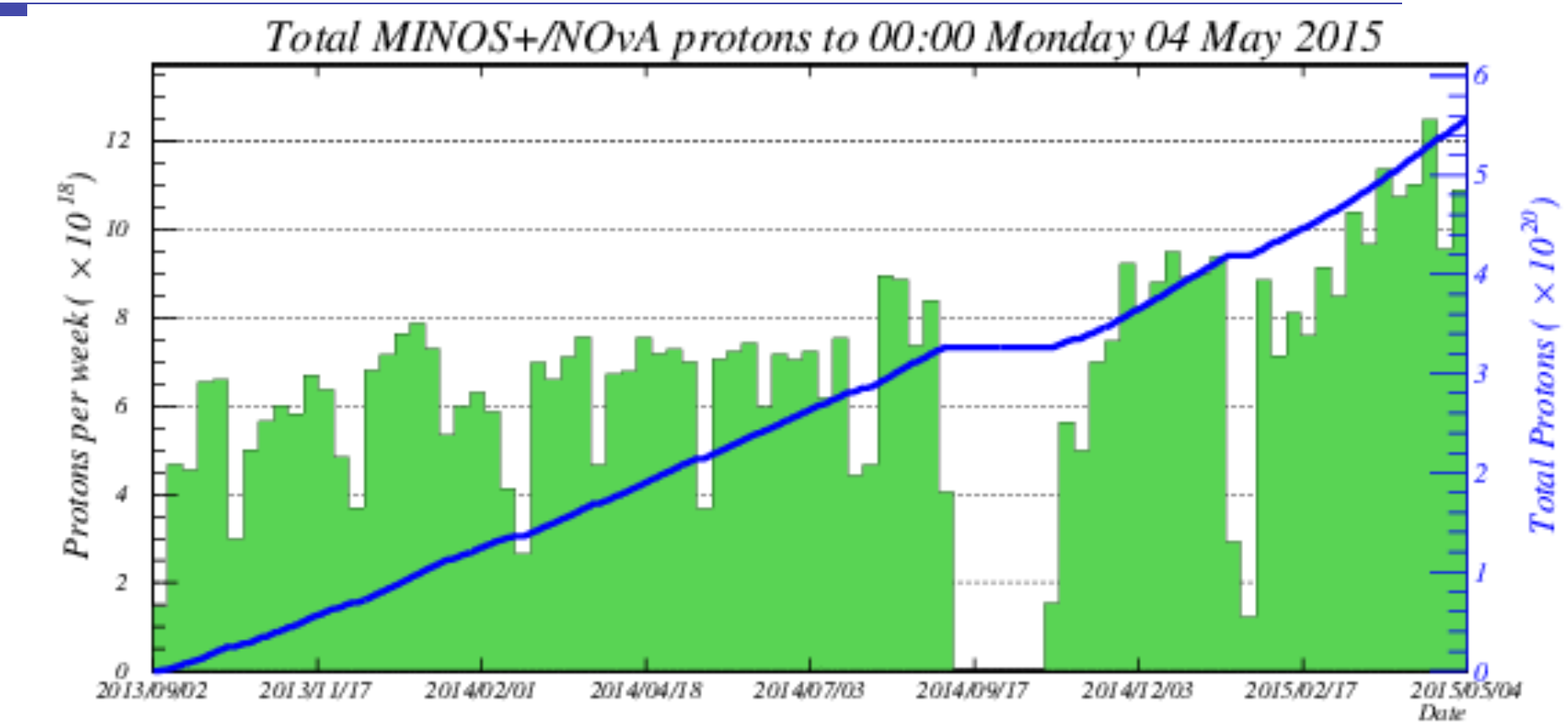
Protons for the Week



1.09×10^{19} POT
Apr 27-May 3, 2015

- Best day on Apr 30 with 19.5×10^{17} POT.
  - This took place while the Switchyard 120 beam line was off & we were getting ~ 480 KW proton intensity.
- 2d best day on Apr 26 with 18.8×10^{17} POT.

Protons for ME Run



55.54 $\times 10^{19}$ POT - Sep 6, 2013 at 15:00 – May 3, 2015